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### Abstract

A novel screening method useful for the selection and development of an insect tolerant genotypes or clones, said method comprising the steps of : (a) generating the clones of an insect tolerant plant through tissue culture as somaclones and establishing their molecular distinctiveness prior to screening through RAPD analysis at *in vitro* stage itself; b) micro-propagating the identified molecular variants for multiplication and checking for the stability at molecular level through RAPD among clones of larger population, c) transferring the identified stable variants after being multiplied to individual culture tubes for forced feeding of insects by releasing actively feeding larvae or nymphs into each culture tube, and d) multiplying *in-vitro* the surviving clones and rechecking for insect larval non-preference and then field evaluating under natural or artificial insect infestation conditions.